

**217.1**

ITEM	DESCRIPTION	UNIT
212003-*	ROCK EXCAVATION	CUBIC YARD (METER)
212004-*	COFFERDAM	EACH
212005-*	SELECT MATERIAL FOR BACKFILLING	CUBIC YARD (METER)

\*Sequence number

**213 THROUGH 216-BLANK**

## SECTION 217 SPECIAL ROCK FILL

**217.1-DESCRIPTION:**

This work shall consist of furnishing and placing at the foot of embankments, inside or outside the neat line, where called for on the Plans or as directed by the Engineer, durable rock in accordance with the Specifications and in reasonably close conformity to the lines, grades, dimension and sections shown on the Plans

**217.2-MATERIALS:**

The rock for special rock fill shall meet the requirements specified in [704.5](#).

**217.3-CONSTRUCTION METHODS:**

Where possible, the material shall be handled as ordinary rock embankment as prescribed in [207.7.3](#); however, if the location for the special rock fill is not accessible to ordinary placing, the material may be placed by other methods.

Foundation trenches and other necessary excavations shall be excavated by the Contractor, in accordance with the applicable provision of [212](#), and approved by the Engineer before the placing of the special rock fill is begun.

Unless otherwise shown on the Plans or directed by the Engineer, the rock fill shall extend approximately 2 ft. (600 mm) below the bed of the stream.

**217.4-METHOD OF MEASUREMENT:**

The quantity of work done will be measured in cubic yards (meters) of "Special Rock Fill", complete in place and accepted, determined by the method of average end areas.

**217.5-BASIS OF PAYMENT:**

The quantity, determined as provided above, will be paid for at the contract unit price bid for this item, which price and payment shall be full compensation for furnishing all the material and doing all the work prescribed in a workmanlike and acceptable manner, including all labor, tools, equipment, and incidentals necessary to complete the work.

**217.6-PAY ITEM:**

ITEM	DESCRIPTION	UNIT
217001-*	SPECIAL ROCK FILL	CUBIC YARD (METER)

\*Sequence number

## SECTION 218 SLOPE AND FOUNDATION PROTECTION

### 218.1-DESCRIPTION:

This work shall consist of the construction of revetments of stone or concrete, with or without engineering fabric, to prevent erosion of slopes or banks, or to protect foundations, at places indicated on the Plans or where designated by the Engineer, all in accordance with these Specifications and in reasonable close conformity with the lines, grades, dimension, and cross sections shown on the Plans.

### 218.2-MATERIALS:

Materials shall meet the requirements specified in the following Sub-sections of Division 700:

MATERIALS	SUBSECTION
Cement for Grout	701.1 or 701.3
Sand for Grout	702.1.1 through 702.1.5 and 702.6, or 702.2
Stone for Riprap	704.2
Stone for Gabions	704.3
Gabions	715.23
Reinforcement	709.3, 709.4
Shot Rock	704.8
Engineering Fabric for Erosion Control	715.11

The stone for crushed rock slope protection shall meet the requirements of 704.6, Class 7, except 704.6.3. Acceptance will be on the basis of the producers written certification the material meets the requirements. The certification for Class 7 material shall include a description of the crushing operation indicating the screens used. An alternate to this gradation shall be AASHTO size No. 1. Certified test data from the producer showing the AASHTO No. 1 material meets the gradation requirements of 703.4, when tested from samples obtained at a minimum frequency of one sample per half day of stockpiling, and does not exceed a weighted loss of 30 percent when subjected to five cycles of the Sodium Sulfate Soundness Test, ASTM C 88, will be acceptable.

Stone for foundation protection shall conform to the requirements of riprap